BUREAU OF ENVIRONMENT CONFERENCE REPORT

SUBJECT: NHDOT Monthly Natural Resource Agency Coordination Meeting **DATE OF CONFERENCE:** December 19, 2018

LOCATION OF CONFERENCE: John O. Morton Building

ATTENDED BY:

NHDOT

Matt Urban

Ron Crickard

Doug Locker

Tim Boodey

Chris Carucci

Rebecca Martin

Julius Nemeth

ACOE

Mike Hicks

NHDES

Gino Infascelli Lori Sommer

(When viewing these minutes online, click on an attendee to send an e-mail)

PRESENTATIONS/ PROJECTS REVIEWED THIS MONTH: (minutes on subsequent pages)

| Finalize November 21, 2018 meeting minutes | 2 |
|--|---|
| Monroe, #42411 | |
| Dixville, #42398 | |
| Bow, #42300 | |
| Stratford, #41788 | |

(When viewing these minutes online, click on a project to zoom to the minutes for that project)

NOTES ON CONFERENCE:

Finalize November 21, 2018 meeting minutes.

Matt Urban indicated that comments and edits regarding the November 21st Natural Resource Agency meeting minutes had come in from several people* and that he would like to finalize the minutes with those edits incorporated into them. The group agreed. The minutes were finalized and posted subsequent to the meeting.

*Gino Infascelli, Amy Lamb, Carol Henderson, Jon Hebert, John Magee, Chris Carucci, Pete Walker, Wendy Johnson, and Lori Sommer all commented on the minutes.

Monroe, #42411

Doug Locker provided an overview of the project. The project is the rehabilitation of an existing bridge, Monroe 125/113, carrying NH 135 over Roaring Brook. The existing bridge is an existing concrete slab with a 17' span and was constructed in 1933 and rebuilt in 1980. The drainage basin at this location was stated to be 4.66 square miles, and the NHB report was cited as having no record. It was also noted the site had knotweed present, but we would not be impacting that area. It was presented that the proposed work would include stabilizing the northeast bank by adding riprap and constructing a new wingwall. Photos were shown of the site and structure including images that showed how the existing structure had experienced scour and erosion.

Mike Hicks asked if there would be any tree clearing for this project, and Doug Locker said there was no need. Mike also asked if a cultural review would be done. Matt Urban said the cultural review would be completed by Bureau of Environment.

It was agreed that there was a need for mitigation for this project with regards to the length of the new wing along both the channel and the bank on the northeast quadrant.

This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.

Dixville, #42398

Doug Locker provided an overview of the project. The project is the rehabilitation of the bridge, Dixville 206/101 carrying NH 26 over Flume Brook. This bridge is a concrete arch that spans 15' and has a drainage basin of 10.32 sq. miles. The NHB was cited as having a record but not expected to be impacted. The proposed work was stated to be repair to the wingwalls and centerline joint requiring temporary impacts, riprap needed to stabilize the southern bank, and a toe wall to prevent further undermining of the southern abutment.

Mike Hicks advised that the bridge should be cleared through historic review. The cultural resources program in the Bureau of Environment will review the project. M. Hicks asked if any trees will be cleared. D. Locker advised that no trees would be cleared.

Bridge 206/101 is the northern of the two crossings under NH Route 26 on the topographic map presented.

The bridge database had listed the bridge as crossing Clear Stream which is essential fish habitat, however through further review it was determined that the bridge crosses Flume Brook. This correction was mentioned by Gino Infascelli in the meeting and later confirmed by Sarah Large. M. Hicks indicated that if the stream is actually Flume Brook an EFH assessment would not be needed since Flume Brook is not listed as EFH.

Lori Sommer mentioned mitigation would not be required as a result of riprap already present and being within 10' of the structure. G. Infascelli added that the work is also needed to protect the existing infrastructure.

This project was previously discussed at the 11/21/2018 Monthly Natural Resource Agency Coordination Meeting.

Bow, #42300

- Christopher Carucci and Matt Urban presented the project.
- The project is Turnpikes Funded (non-fed.)
- Ad-Date May 2019
- Project is located south of the I-89 interchange on I-93 North and Southbound in the Town of Bow.
- The structure is located on a Tier 2 Stream, perennial, with no history of flooding.
- Streamstats drainage area is 0.58 square miles (375 acres). The structure consists of a 48"RCP at the inlet which transitions to a junction box under the interstate, and then transitions again to a 48"CMP. There are stone headwalls on the 48" rcp inlet and 48" cmp outlet.
- The segment of 48" rcp was constructed in 1957 and is approximately 180' long at 9% slope.
- The segment of 48" cmp was constructed in 1977 and is approximately 144' long at 15% slope.
- A portion of I-93 closed drainage was connected to the junction box with a 15" metal pipe which has failed.
- Turnpikes forces plugged the 15" cmp and installed a short segment of 18" slope drain to provide an outlet for the closed drainage.
- The 48" CMP at the outlet is the section of pipe that is rusted and in need of rehabilitation.
- The Inlet header is also in need of rehabilitation.
- The outlet is perched approximately 12"
- Matt Urban summarized the following environmental information:
 - o The stream has been delineated as perennial.
 - o Regional curve estimates the bank full width at 9.6'
 - Stream is considered a Tier 2 Stream
 - o Anticipate Env-Wt904.06 (consistent with proposed sliplining).
 - o Anticipate Temp impacts only to facilitate lining and headwall repairs.
 - o Anticipate No need for Mitigation.
 - Cultural Review was completed with no above or below ground concerns. Also that this
 work falls under the Section 106 Exemption regarding effects to the interstate Highway
 System.
 - o NHB search (NHB18-3420) indicated no concerns for the project
 - IPAC- identified NLEB and Small Whorled Pogonia (SWP). Matt Indicated that during field reviews the SWP was not found, habitat thought not to be suitable. As for NLEB Matt indicated there would be some clearing but that the Department has submitted the 4(d) consultation to the USFWS.
 - Additional coordination with NHF&G was completed to discuss the steep slope of the
 pipes and the existing perch. John Magee ran the Coffman thesis analysis and was able to
 determine that it was unlikely that any fish passage would be occurring at this location
 with the exception of a very diligent adult brook trout as a possibility.
 - Not within shoreland jurisdiction, however project is located within ¼ mile of the Merrimack River and therefore the Merrimack Local River Advisory Committee will be notified upon submission of the wetlands application.

- Chris indicated that the proposed work consisted of installing a 42" polymer coated corrugated metal liner within the existing 48"CMP.
- Existing stone channel protection at the outlet will be reset to match the new outlet invert.
- Existing and proposed structure will pass the Streamstats Q100.
- Temporary impacts at inlet and outlet are to accommodate the work/water diversion required.
 - o Anticipate approximately 800 SF at the inlet and 300 SF at the outlet.
 - o No permanent impacts proposed.
- Incidental work includes repairs to stone inlet and outlet headwalls, extending the 18" slope drain, and replacing a 15" pipe under the I-89 off ramp with an 18" pipe so that the closed drainage system flows to the new slope drain outlet.
- Lori inquired if the proposed work would be impacted by the Bow-Concord project. Chris indicated no and showed the approximate limits of Bow-Concord work in relation to this work.
- Matt asked for concurrence that no mitigation would be needed since the impacts were going to be all temporary. Lori agreed.
- Chris indicated that the Department was hopeful to submit an application within the next couple of weeks.

This project has not been previously discussed at the Monthly Natural Resource Agency Coordination Meeting.

Stratford, #41788

Rebecca Martin provided a brief overview of the proposed project and described the existing crossing. The Nature Conservancy (TNC) partnered with District 1 to secure a grant through the National Fish and Wildlife Foundation – New England Forests and Rivers Fund. The funds come from US Fish and Wildlife Service. R. Martin explained that the existing box culvert is 4 feet wide and 4.2 feet high and has a slope of approximately 19%. The outlet of the structure is perched more than 4 feet. The proposed structure would be 7 feet wide and 5 feet high. The new structure would include streambed simulation and would have a slope of around 6%.

Matt Urban explained that although the project will have permanent impacts on the stream, the project team believes the project to be self-mitigating. M. Urban commented that the project has been discussed at the November NRAC Meeting and was being discussed at this meeting to determine appropriate mitigation. M. Urban shared that at Gino Infascelli's recommendation, the designer, Jim McMahon from District 1 has adjusted the design from one feet of embedment to two feet of embedment and no baffles.

The group discussed that fish cannot pass upstream through the structure due to the perch. Comments were made about the wide variety of wildlife currently using the perched structure. The group also discussed that the project would be monitored after construction to ensure the design is working as intended.

M. Urban reminded the group that downstream of the outlet a natural gas pipeline was installed. It appears that when it was installed the pipeline disturbed the channel of the stream. As a result of the pipeline installation, the ditch line/branch adjacent to the roadway appears to have been disconnected/disrupted. As part of the project, District 1 is proposing to reconnect the channel adjacent to the roadway.

Lori Sommer inquired about access to the project area. M. Urban commented that the gas pipeline work had utilized an area just south of the culvert to access the outlet area, so without checking with District 1, he assumed this area would be used once again for this project.

- L. Sommer shared some details of a box culvert project on Portsmouth Street that is being planned by Michie Corps that will utilize a pre-cast concrete box that is in two pieces, a bottom and a top. The bottom will be installed and the streambed material will be placed inside the box before the notched top piece is connected to the bottom piece.
- R. Martin reminded the group that the funding for the project is constrained with NFWF grant funding and the District conducting the work as match for the grant.
- L. Sommer and G. Infascelli agreed that the project would be self-mitigating. G. Infascelli commented that if the Department were to apply to replace the structure in-kind without extending the structure or addressing the slope, there would not be the same improvement.

This project was previously discussed at the 11/21/2018 Monthly Natural Resource Agency Coordination Meeting.